Claims

What is claimed is:

- 1. An oil containing starch granule comprising:
- 5 (a) a starch, said starch being present in an amount to form an effective matrix for said granule;
 - (b) an oil, said oil being capable of providing a benefit-additive to a substrate upon contact therewith, said substrate being selected from the group consisting of fabrics, hard surfaces, hair and skin; and
 - (c) an effective amount of an organic compound for inhibiting the migration of said oil to the surface of said starch granule, said compound being represented by the following structure:

$$R_2$$
— Y — $(CH_2)_q$ — $(Q)_m$ — B

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wherein R₁ and R₂ are each independently, H or:

- (a) C_1 - C_{22} alkylenecarboxy moiety having the formula $-(CH_2)_eR_3$ wherein R_3 is —NHCOR₄; or —OCOR₄; or —NR₅COR₄; and wherein R_4 and R_5 are each independently C_1 - C_{22} akyl or alkenyl; and e is an integer from 1 to 22; or
 - (b) C₁-C₂₂ linear or branched alkyl; or
 - (c) C_1 - C_{22} linear or branched alkenyl; or
 - (d) C₂-C₂₂ substituted or unsubstituted alkylenoxy; or
 - (e) C₃-C₂₂ substituted or unsubstituted alkylenoxy alkyl; or
 - (f) C_6 - C_{22} substituted or unsubstituted aryloxy; or
 - (g) C₇-C₂₂ substituted or unsubstituted alkylenearyl; or
 - (h) C₇-C₂₂ substituted or unsubstituted alkyleneoxyaryl; or
 - (i) C_7 - C_{22} oxyalkylenearyl; or
 - (i) an anionic unit having the formula:

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$$---(CH2)vR6$$

wherein R₆ is -SO₃M, -OSO₃M, -PO₃M, -OPO₃M, Cl or mixtures thereof, wherein M is hydrogen, or one or more salt forming cations sufficient to satisfy charge balance, or mixtures thereof;

y is an integer from 1 to about 22; or

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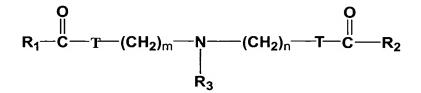
(k) a mixture comprising at least two of (a) through (j); and q is an integer from 0 to about 22; m is an integer from 0 to about 22; Q is (CH₂)_m or

q is an integer from 0 to about 22; m is an integer from 0 to about 22; Q is (CH_2O_m) or (CH_2CHR_7O) ; R_7 is independently hydrogen, methyl, ethyl, propyl or benzyl; B is H or OH; and Y is CR_1 or N.

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- 2. An oil containing starch granule comprising:
- (a) a starch, said starch forming a matrix for said granule;
- (b) an oil, said oil being capable of providing a benefit-additive to a substrate upon contact therewith, said substrate being selected from the group consisting of fabrics, hard surfaces, hair and skin; and
- (c) an effective amount of a difatty amido amine compound for inhibiting the migration of said oil to the surface of said starch granule, said compound being represented by the following structure:



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wherein R_1 and R_2 , independently, represent C_{12} to C_{30} aliphatic hydrocarbon groups, R_3 represents $(CH_2CH_2O)_pH$, CH_3 or H; T represents NH; n is an integer from 1 to 5; m is an integer from 1 to 5 and p is an integer from 1 to 10.

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- 3. An oil containing starch granule comprising:
- (a) a starch, said starch forming a matrix for said granule;
- (b) an oil, said oil being capable of providing a benefit-additive to a substrate upon contact therewith, said substrate being selected from the group consisting of fabrics, hard surfaces, hair and skin; and

(c) an effective amount of a quaternary ammonium compound for inhibiting the migration of said oil to the surface of said starch granule, said compound being represented by the following structure:

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$$\begin{bmatrix} R_1 \\ R_2 & Y \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & | \\ & |$$

wherein R₁ and R₂ are each independently, H or:

- (a) C_1 - C_{22} alkylenecarboxy moiety having the formula:
- -(CH₂)_eR₃ wherein R₃ is —NHCOR₄; or —OCOR₄; or —NR₅COR₄; and wherein R₄ and R₅ are each independently C₁-C₂₂ akyl or alkenyl; and e is an integer from 1 to 22; or
 - (b) C₁-C₂₂ linear or branched alkyl; or
 - (c) C₁-C₂₂ linear or branched alkenyl; or
 - (d) C_2 - C_{22} substituted or unsubstituted alkylenoxy; or
 - (e) C₃-C₂₂ substituted or unsubstituted alkylenoxy alkyl; or
 - (f) C₆-C₂₂ substituted or unsubstituted aryloxy; or
 - (g) C₇-C₂₂ substituted or unsubstituted alkylenearyl; or
 - (h) C₇-C₂₂ substituted or unsubstituted alkyleneoxyaryl; or
- 25 (i) C₇-C₂₂ oxyalkylenearyl; or
 - (i) an anionic unit having the formula:

---(CH₂)_vR₆

wherein R₆ is -SO₃M, -OSO₃M, -PO₃M, -OPO₃M, Cl or mixtures thereof, wherein M is hydrogen, or one or more salt forming cations sufficient to satisfy charge balance, or mixtures thereof; R₆ may also be choloride; y is an integer from 1 to about 22; and

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(k) a mixture comprising at least two of (a) through (j); and q is an integer from 0 to about 22; m is an integer from 0 to about 22; Q is $(CH_2)_m$ or (CH_2CHR_7O) ; R_7 is independently hydrogen, methyl, ethyl, propyl or benzyl; and mixtures thereof; B is H or OH; Y is N; R_8 is H or C_1 - C_4 alkyl; Z^- is a counter anion, and preferably chloride,or methyl sulfate.

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- 4. An oil containing starch granule in accordance with claims 1, 2 or 3 wherein said oil comprises a perfume.
- 5. A method of preparing an oil containing starch granule comprising the steps of:
 - (a) providing a dispersion of starch in water to form a starch slurry;
 - (b) melting an effective amount of an organic compound such as an amido amine comprising bis (alkyl amidoethyl)-2-polyethoxy amine to form an amidoamine melt;

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- (c) adding a fragrance oil to the organic compound melt or amidoamine melt of step(b) to form a solution of amidoamine in fragrance oil;
- (d) adding the solution of step (c) to the starch slurry of step (a);
- (e) homogenizing the resultant slurry by mixing to form a uniform homogeneous mixture; and
- (f) spray-drying said homogeneous mixture to form an oil containing starch granule.
- 6. The method according to claim 5 wherein said organic compound is a quaternary ammonium compound.

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- 7. A method of laundering fabrics comprising the steps of
- (a) forming an aqueous solution containing an effective amount of the oil containing starch granule in accordance with claims 1, 2 or 3; and
- (b) contacting the fabrics to be laundered with the aqueous solution of (a).

- 8. A method in accordance with claim 7 wherein said oil comprises a perfume.
- 9. A method in accordance with claim 7 wherein said oil containing starch granule comprises a difatty amido amine compound.

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10. A method in accordance with claim 7 wherein said oil containing starch granule comprises a quaternary ammonium compound.

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- 11. A laundry detergent composition comprising:
- (a) a surfactant or surfactant mixture selected from the group consisting of anionic, nonionic and cationic surfactants; and
- (b) an effective amount of an oil containing starch granule in accordance with claims 1, 2 or 3.

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12. A laundry detergent composition in accordance with claim 11 where said oil comprises a perfume.

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13. A laundry detergent composition in accordance with claim 11 wherein said oil containing starch granule comprises a difatty amido amine compound.

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14. A laundry detergent composition in accordance with claim 11 wherein said oil containing starch granule comprises a quaternary ammonium compound.